

WHAT IS CLAIMED IS:

1. A photothermographic material comprising an image forming layer containing at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder, on one surface of a support, and comprising at least one back layer and a back surface protective layer, on the other surface of the support, wherein a binder of the back surface protective layer contains a water-soluble polymer and a latex polymer having a glass transition temperature of -30°C to 40°C.

2. The photothermographic material according to claim 1 comprising the latex polymer in an amount of 5% by weight to 50% by weight with respect to a total amount of the binder in the back surface protective layer.

3. The photothermographic material according to claim 2 comprising the latex polymer in an amount of 15% by weight to 40% by weight with respect to the total amount of the binder in the back surface protective layer.

4. The photothermographic material according to claim 1, wherein the latex polymer has a glass transition temperature of -30°C to 24°C.

5. The photothermographic material according to claim 1, wherein the latex polymer is at least one

polymer selected from acrylic polymers, styrene polymers, acrylic/styrene copolymers, styrene/butadiene copolymers, vinyl chloride polymers, vinylidene chloride polymers and urethane polymers.

6. The photothermographic material according to claim 5, wherein the latex polymer is an acrylic latex polymer.

7. The photothermographic material material according to claim 1, wherein the latex polymer has an I/O value of 0.1 to 1.0.

8. The photothermographic material according to claim 7, wherein the latex polymer has an I/O value of 0.5 to 0.9.

9. The photothermographic material according to claim 1, wherein the latex polymer comprises an anionic surfactant.

10. The photothermographic material according to claim 9, wherein the anionic surfactant is at least one selected from salts of alkylbenzene sulfonic acid and diesters of sulfosuccinic acid.

11. The photothermographic material according to claim 1, wherein the water-soluble polymer is gelatin.

12. The photothermographic material according to claim 1, wherein the water-soluble polymer is at least one selected from polyvinyl alcohols and acrylic acid/

polyvinyl alcohol copolymers.

13. The photothermographic material according to claim 1 comprising a fluorocarbon compound containing a fluoroalkyl group having two or more carbon atoms and 13 or less fluorine atoms.

14. The photothermographic material according to claim 13 comprising a fluorocarbon compound containing a fluoroalkyl group having 5 to 9 fluorine atoms.

15. An image forming method for a photothermographic material using a thermal developing apparatus, wherein the thermal developing apparatus comprises a thermal development portion having a driving roller and a plate heater, and the photothermographic material according to claim 1 is thermally developed by contacting a surface of the photothermographic material at a side at which the image forming layer is disposed with the driving roller, and by contacting a surface of the photothermographic material at a side at which the back layer is disposed with the plate heater.